APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 08-Apr-2008

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Norfolk District, NAO-2008-00129-GDC-JD1

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State :	VA - Virginia
County/parish/borough:	Chesapeake
City:	
Lat:	36.7852777777778
Long:	-76.3786111111111
Universal Transverse Mercator:	[ ]
Name of nearest waterbody:	Elizabeth River
Name of nearest Traditional Navigable Water (TNW):	Elizabeth River
Name of watershed or Hydrologic Unit Code (HUC):	2080208

☑ Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.

☐ Check if other sites (e.g., offsite mitigation sites, disposal sites, etc¿) are associated with the action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION:

☑ Office Determination Date: 08-Apr-2008

☑ Field Determination Date(s): ☐ 04-Apr-2008

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION

There [ ] "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area.

☐ Waters subject to the ebb and flow of the tide.

☐ Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.

Explain:

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There [ ] "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area.

1. Waters of the U.S.
a. Indicate presence of waters of U.S. in review area:[1]

Water Name	Water Type(s) Present
USUI Wetland 1	Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs

b. Identify (estimate) size of waters of the U.S. in the review area:

Area:
Linear:

c. Limits (boundaries) of jurisdiction:

based on: 1987 Delineation Manual.
OHWM Elevation: (if known)

2. Non-regulated waters/wetlands:[3]

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1.TNW
Not Applicable.

2. Wetland Adjacent to TNW
Not Applicable.

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size:	15 acres
Drainage area:	15 acres
Average annual rainfall:	45 inches
Average annual snowfall:	2 inches

(ii) Physical Characteristics
(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☑ Tributary flows through [ ] tributaries before entering TNW.

:Number of tributaries

Project waters are 1-2 river miles from TNW.
Project waters are 1 (or less) river miles from RPW.
Project Waters are 1-2 aerial (straight) miles from TNW.
Project waters are 1 (or less) aerial(straight) miles from RPW.

☐ Project waters cross or serve as state boundaries.

Explain:

Identify flow route to TNW:[5]
From wetland, into storm drains at south east and west corners of site, 660 feet south to permanantly flooded stormwater lake, then eastward down Cook Blvd, through several driveway culverts, under Cavalier Blvd, into the large stormwater lake around Camelot Subdivision. This lake flows into Saint Julian Creek and then into the Southern Branch Elizabeth River.

Tributary Stream Order, if known:
Not Applicable.

(b) General Tributary Characteristics:
Tributary is:
Not Applicable.

Tributary properties with respect to top of bank (estimate):
Not Applicable.

Primary tributary substrate composition:
Not Applicable.

Tributary (conditions, stability, presence, geometry, gradient):
Not Applicable.

(c) Flow:
Not Applicable.

Surface Flow is:
Not Applicable.

Subsurface Flow:
Not Applicable.

Tributary has:
Not Applicable.

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction:

High Tide Line indicated by:
Not Applicable.

Mean High Water Mark indicated by:
Not Applicable.

(iii) Chemical Characteristics:
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality;general watershed characteristics, etc.).
Not Applicable.

(iv) Biological Characteristics. Channel supports:
Not Applicable.

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:
(a) General Wetland Characteristics:
Properties:
Not Applicable.

(b) General Flow Relationship with Non-TNW:
Flow is:
Not Applicable.

Surface flow is:
Not Applicable.

Subsurface flow:
Not Applicable.

(c) Wetland Adjacency Determination with Non-TNW:
Not Applicable.

(d) Proximity (Relationship) to TNW:
Not Applicable.

(ii) Chemical Characteristics:
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).
Not Applicable.

(iii) Biological Characteristics. Wetland supports:
Not Applicable.

3. Characteristics of all wetlands adjacent to the tributary (if any):

All wetlands being considered in the cumulative analysis:

Wetland Name	Directly Abuts	Size (acres
USUI Wetland 1	No	20234.28
Total:		**20234.28**

Summarize overall biological, chemical and physical functions being performed:

Wetland Name	Functional Summary
USUI Wetland 1	1. Geomorphic Setting: The site is flat in a relatively flat landscape. It has mineral soils with a seasonally high water table. The litter and root layers in the top of the soil horizon are well suited to detain water. Accordingly, this site provides a high degree of water storage, contributes water recharge, nutrient cycling, pollutant removal from surrounding runoff where it occurs and rain borne pollutants, and particulate retentio particulate migration into receiving interstate waters. 2. The ratio of the wetland size to the drainage area is XX%. Therefore, it performs a si of functions for the watershed. 3. Vegetation Strata, litter, Coarse Woody Debris: The canopy is fully mature, with trees, saplings, shrubs, he thick litter layer. There exists a relatively extensive cover of coarse woody debris. The wetlands leaf litter and root mat at the soil surface, alc vegetation, make it very stable during rain events, resulting in minimal discharge of sediment in runoff from the site. 4. Redoximorphic Conce denitrification: The site is well suited for the uptake of nitrogen when anaerobic conditions occur. Redox features are present but not promine which are well depleted. 5. Surrounding Land Use: Primarily industrial with some forested remnants. 6. Detriment of wetland loss on receivir wetlands provide a source of higher quality water to the tributary system and interstate waters than would developed sites. By the relatively i of the soils and seasonally high water table, the site detains water and allows it to settle, thereby being subjected to the wetlands filtering pro that runs from this site into interstate waters is of higher quality than from sites with less detention. Also, the detention times for water in wetl these provide the function of de-nitrification; or bacterial uptake of nitrogen during anaerobic conditions. Nitrogen is a deleterious pollutant th harm to receiving waters, and is also usually bound to sediment runoff. Many local rivers have experienced problems with red algal tides due loading. Red tides harm aquatic organisms (base of food chain to the seafood industry) and the tourism industry when occurring along beacl functions would have a negative effect on interstate waters. If this sites wetlands were cleared and developed, there would inherently be mo sediment into the tributaries to interstate waters. Long term water quality of the inputs from this site to receiving waters would be degraded p from chemicals associated with asphalt and other construction materials, petroleum products from vehicles, trash, and etc. Also, the faster ra water runoff from hardened surfaces will carry more of these pollutants into receiving waters, along with causing more erosion within the trib receiving waters. Experience with similar sites and with the study of stream processes has shown this to be highly probable and predictable. wetland loss in the aggregate: In the aggregate, the hundreds or thousands of acres of wetlands in this part of the watershed would be simila the detriments to interstate waters outlined in A and B above would be multiplied in the aggregate by the loss across the entire system over development pressures in Southeastern Virginia, unregulated wetlands would not last long. The negative impact would actually be exponent sum of the whole, if lost, would be greater than the proportion of any individual or project specific loss. It would potentially cause degradatior capacity (siltation) and water quality of the James River and its tributaries. Experience has shown similar degradations on other watersheds experienced similar development and loss of wetlands in their upstream reaches. Examples are the Elizabeth River, Chesapeake Bay, and v where the shellfish have now become threatened or endangered.

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Findings for: USUI Wetland 1
These wetlands provide a source of higher quality water to the tributary system and interstate waters than would developed sites. By the relatively impervious nature of the soils and seasonally high water table, the site detains water and allows it to settle, thereby being subjected to the wetlands filtering properties, the water that runs from this site into interstate waters is of higher quality than from sites with less detention. Also, the detention times for water in wetlands such as these provide the function of de-nitrification; or bacterial uptake of nitrogen during anaerobic conditions. Nitrogen is a deleterious pollutant that does significant harm to receiving waters, and is also usually bound to sediment runoff. Many local rivers have experienced problems with red algal tides due to N and P loading. Red tides harm aquatic organisms (base of food chain to the seafood industry) and the tourism industry when occurring along beaches. Loss of these functions would have a negative effect on interstate waters. If this sites wetlands were cleared and developed, there would inherently be more discharge of sediment into the tributaries to interstate waters. Long term water quality of the inputs from this site to receiving waters would be degraded post development from chemicals associated with asphalt and other construction materials, petroleum products from vehicles, trash, and etc. Also, the faster rates of storm-water runoff from hardened surfaces will carry more of these pollutants into receiving waters, along with causing more erosion within the tributary to the receiving waters. Experience with similar sites and with the study of stream processes has shown this to be highly probable and predictable. In the aggregate, the hundreds or thousands of acres of wetlands in this part of the watershed would be similarly affected, and the detriments to interstate waters outlined in A and B above would be multiplied in the aggregate by the loss across the entire system over time. With development pressures in Southeastern Virginia, unregulated wetlands would not last long. The negative impact would actually be exponential, because the sum of the whole, if lost, would be greater than the proportion of any individual or project specific loss. It would potentially cause degradation to the navigable capacity (siltation) and water quality of the James River and its tributaries. Experience has shown similar degradations on other watersheds that have experienced similar development and loss of wetlands in their upstream reaches. Examples are the Elizabeth River, Chesapeake Bay, and western rivers where the shellfish have now become threatened or endangered.

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE:

1. TNWs and Adjacent Wetlands:
Not Applicable.

2. RPWs that flow directly or indirectly into TNWs:
Not Applicable.

Provide estimates for jurisdictional waters in the review area:
Not Applicable.

3. Non-RPWs that flow directly or indirectly into TNWs:[8]
Not Applicable.

Provide estimates for jurisdictional waters in the review area:
Not Applicable.

4. Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.
Not Applicable.

Provide acreage estimates for jurisdictional wetlands in the review area:
Not Applicable.

5. Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs:
Not Applicable.

Provide acreage estimates for jurisdictional wetlands in the review area:

Wetland Name	Type	Size (Linea
USUI Wetland 1	Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs	-
Total:		**0**

6. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs:
Not Applicable.

Provide estimates for jurisdictional wetlands in the review area:
Not Applicable.

7. Impoundments of jurisdictional waters:[9]
Not Applicable.

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS:[10]
Not Applicable.

Identify water body and summarize rationale supporting determination:
Not Applicable.

Provide estimates for jurisdictional waters in the review area:
Not Applicable.

F. NON-JURISDICTIONAL WATERS. INCLUDING WETLANDS

☐ If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements:

☐ Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce:

☐ Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based soley on the "Migratory Bird Rule" (MBR):

☐ Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (Explain):

☐ Other (Explain):

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (ie., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment:
Not Applicable.

Provide acreage estimates for non-jurisdictional waters in the review area, that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.
Not Applicable.

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[1]-Boxes checked below shall be supported by completing the appropriate sections in Section III below.
[2]-For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least ¿seasonally¿ (e.g., typically 3 months).
[3]-Supporting documentation is presented in Section III.F.
[4]-Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.
[5]-Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.
[6]-A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody¿s flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.
[7]-Ibid.
[8]-See Footnote #3.
[9] -To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.
[10]-Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.